



# Right Timing for Energy Use with ENTES Astronomic Time Relays



## DTR Series

Automatic Sunrise and  
Sunset Calculation

7/24 Programming by  
City Name or Geographical  
Coordinates

15 or 32 Programming  
and Accurate Timing

1CO or 2CO  
Output Contact (16A)

Interchangeable  
Battery (Optional)

Modbus RS-485  
Communication



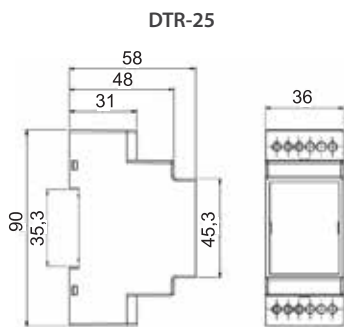
## Product Selection Table

| Product Code |  | Data Transfer | Interchangeable Battery | Programmable Prayer Time | 24 time Programming | Graphical Coordinate Programming (Astronomic) | 15 Programs | 32 Programs | 1 Relay Output (16A) | 2 Relay Output (16A) | DIN2 Rail Mounting | Pcs/Box |
|--------------|--|---------------|-------------------------|--------------------------|---------------------|---|-------------|-------------|----------------------|----------------------|--------------------|---------|
| DTR-10       | Astronomic Time Relay                      |               | •                       |                          | •                   | •   | •           |             |                      | •                    | •                  | 16      |
| DTR-10t      | Astronomic Time Relay                      |               | •                       |                          | •                   | •   | •           |             | •                    |                      | •                  | 16      |
| DTR-20       | Astronomic Time Relay                      |               | •                       |                          | •                   | •   |             | •           |                      | •                    | •                  | 16      |
| DTR-20S      | Astronomic Time Relay (with Communication) | RS-485        | •                       |                          | •                   | •   | •           |             |                      | •                    | •                  | 16      |
| DTR-20TS     | Astronomic Time Relay (with Communication) | RS-485        | •                       |                          | •                   | •   | •           |             | •                    |                      | •                  | 16      |
| DTR-25       | Astronomic Time Relay                      |               |                         | •                        | •                   | •   |             | •           |                      | •                    | •                  | 16      |

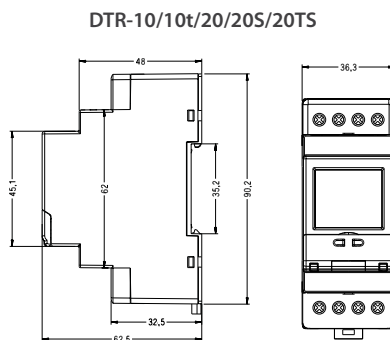
## SPECIFICATION

|                                    | DTR-10                            | DTR-10t                    | DTR-20                     | DTR-20S      | DTR-20TS                   | DTR-25                     |
|------------------------------------|-----------------------------------|----------------------------|----------------------------|--------------|----------------------------|----------------------------|
| <b>ENCLOSURE</b>                   |                                   |                            |                            |              |                            |                            |
| Dimensions                         | PK25                              |                            |                            |              |                            |                            |
| Protection Class                   | IP41 Front Panel , IP20 Terminals |                            |                            |              |                            | IP20                       |
| Display                            | 1.3"LCD                           |                            |                            |              |                            |                            |
| <b>SUPPLY</b>                      |                                   |                            |                            |              |                            |                            |
| Operating Voltage(Un)              | 190 - 260V AC                     |                            |                            | 85 - 265V AC |                            |                            |
| Operating Frequency                | 50 / 60Hz                         |                            |                            |              |                            |                            |
| Power Consumption                  | <10VA                             |                            |                            | <4VA         |                            | <10VA                      |
| <b>INPUTS / OUTPUTS / SETTINGS</b> |                                   |                            |                            |              |                            |                            |
| Output Contact                     | 2C0 16A, 4000VA (cos φ =1)        | 1C0 16A, 4000VA (cos φ =1) | 2C0 16A, 4000VA (cos φ =1) |              | 1C0 16A, 4000VA (cos φ =1) | 2C0 16A, 4000VA (cos φ =1) |
| Refresh Time                       | 1sn                               |                            |                            |              |                            |                            |
| Accuracy                           | < 0.5sec / day                    |                            |                            |              |                            |                            |
| <b>COMMUNICATION</b>               |                                   |                            |                            |              |                            |                            |
| Data Transfer                      |                                   |                            |                            | RS-485       |                            |                            |
| <b>OPERATING CONDITIONS</b>        |                                   |                            |                            |              |                            |                            |
| Operating Temperature              | -25.. + 60                        |                            |                            |              |                            |                            |
| Humidity%                          | 95%                               |                            |                            |              |                            |                            |
| <b>CONNECTIONS</b>                 |                                   |                            |                            |              |                            |                            |
| Mounting                           | Rail Mounting                     |                            |                            |              |                            |                            |
| Connection Types                   | Single Phase 2 Wires              |                            |                            |              |                            |                            |

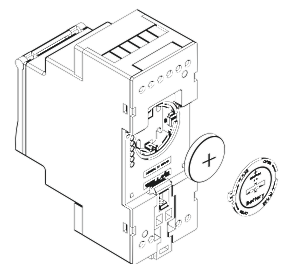
### Dimensions (mm)(Type PK 25)



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### Battery Change



- 1) When the battery is replaced, disconnect the mains connection. Open the battery cover.
- 2) Place new battery (the "+" sign on top of the battery)
- 3) Close the battery cover.

## HEADQUARTERS

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